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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/458,190	12/09/1999	BRADLEY CAIN	2204/185	8564

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EXAMINER

VO, LILIAN

ART UNIT PAPER NUMBER

2195

DATE MAILED: 05/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/458,190

Applicant(s)

CAIN, BRADLEY

Examiner

Lilian Vo

Art Unit

2195

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 - 6, 8 - 11 and 13 - 15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) - 6, 8 - 11 and 13 - 15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Claims 1 – 6, 8 – 11 and 13 - 15 are pending. Claims 7 and 12 have been cancelled.

#### *Claim Rejections - 35 USC § 101*

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 1 – 6 and 8 - 10 are rejected under 35 U.S.C. 101 because they are directed to non-statutory subject matter.

4. **Claims 1 – 5** are directed to method steps, which can be practiced mentally in conjunction with pen and paper, therefore they are directed to non-statutory subject matter. Specifically, as claimed, it is uncertain what performs each of the claimed method steps. Moreover, each of the claimed steps, inter alia, associating, executing, raising, lowering, can be practiced mentally in conjunctions with pen and paper. The claimed steps do not define a machine or computer implemented process [see MPEP 2106]. Therefore, the claimed invention is directed to non-statutory subject matter. (The examiner suggests applicant to change “method” to “computer implemented method” in the preamble to overcome the outstanding 35 U.S.C. 101 rejection).

5. Regarding **claims 6 and 8 - 10**, the device is at best a software device, per se, failing to be tangibly embodied or include any recited hardware as part of the device.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 2, 3, 5, 6, 8, 10, 11, 13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saleh et al. (US Pat. Application Publication 2003/0058804 A1, hereinafter Saleh) in view of Welland et al. (US 5,247,677, hereinafter Welland).

8. Regarding **claim 1**, Saleh discloses a method for expediting a selected operation in a computer system, the method comprising:

associating a plurality of routing operations with an operating system task, the plurality of routing operations including the selected operation (abstract: establishing path between nodes, page 8, paragraph 96 – 97, and figs. 5 - 6);

executing the operating system task at a low priority level prior to performing the selected operation (page 4, paragraph 55: some tasks are processed at a lower priority than the other); and

performing the selected operation in response to the detection of a trigger condition comprising a link state advertising message indicating that the selected operation is to be performed (page 8, paragraphs 96 – 100, page 20, paragraph 237 and figs. 5 and 6. Each node is required to send a periodic Hello message that may contain several LSAs, paragraph 97. Certain

actions are performed by the node to handle the receiving LSAs message, paragraph 99 – 98 and fig. 6).

Saleh did not clearly disclose the step of raising the operating system task to a high priority level to perform the selected operation. Instead, Saleh discloses (paragraph 55) that some tasks are being processed at a lower priority level than the other. Saleh also discloses (paragraphs 99 – 100, and fig. 6) that when a node receives LSAs message, it is first analyzed to determine the appropriate actions to be formed. The LSA is then acknowledged by sending back an appropriate response to the node having transmitted the message.

It is obvious for one of an ordinary skill in the art, at the time the invention was made, to recognize that when a Hello message is sent out with the LSAs, certain operations need to be performed as appropriate, thus implies boosting the tasks to a higher priority than normal to carry out the actions.

In addition, Welland discloses that when an event is reported for a task, it would raise the current priority of the task to a higher priority level (col. 4, line 63 – col. 4, line 4). It would also obvious for one of an ordinary skill in the art, at the time the invention was made, to combine Welland's teaching with Saleh to boost a current priority of a task to a higher priority level so that necessary operation can be formed in a timely manner to enhance system performance.

9. Regarding **claim 2**, as modified Saleh discloses the step of raising the operating system task to a high priority level upon detecting the trigger condition (Welland: col. 4, line 63 – col. 4, line 4).

Art Unit: 2195

10. Regarding **claim 3**, Saleh discloses a routing task (abstract: establishing path between nodes. Page 8, paragraph 96 – 97, and figs. 5 – 6: sending messages to each other), and the link state advertisement protocol message includes link status information (abstract, page 8, paragraphs 97 – 100).

11. Regarding **claim 5**, Saleh discloses that some activities such as topology distribution are having a lower priority (page 4, paragraph 55) and that the periodic requirement to send LSAs messages at the node trigger certain actions to be performed at the time (page 8, paragraphs 96 – 100).

It is obvious for one of an ordinary skill in the art, at the time the invention was made, to recognize that Saleh teaches the limitation as claimed, in which the periodic requirement of sending LSAs message, when happen, boost the priority of the task to perform certain actions and after the performance which relate to LSAs message have been completed, go back to the normal or previous level.

12. **Claims 6, 8, 10, 11, 13 and 15** are rejected on the same ground as stated in claims 1 – 3 and 5 above.

13. Claims 4, 9 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saleh et al. (US Pat. Application Publication 2003/0058804 A1, hereinafter Saleh) in view of Welland et al. (US 5,247,677, hereinafter Welland) as applied to claims 1, 6 and 11 above, and further in view of Feldman et al. (US 6,148,000, hereinafter Feldman).

14. Regarding **claim 4**, Saleh and Welland did not disclose the additional limitation as claimed. Nevertheless, Feldman discloses the use of Dijkstra shortest path algorithm calculation that utilizes the unique router “labels” received in the link state advertisement protocol message (col. 13, lines 40 – col. 14, line 26).

It would have been obvious for one of ordinary skill in the art, at the time the invention was made to include Feldman’s teaching to Saleh and Welland combined to utilize Dijkstra algorithm so that the system have the capability to determine the shortest route in the communication network.

15. **Claims 9 and 14** are rejected on the same ground as stated in claim 4 above.

#### *Response to Arguments*

16. Applicant's arguments filed on 2/23/05 have been fully considered but they are not persuasive for the reasons set forth above and below.

17. Regarding applicant’s remark on page 6, last paragraph in which applicant believes the examiner’s conclusion is inconsistent with the teaching of Saleh, the examiner disagrees. Application note that “topology distribution ... runs ... at a much lower priority...” (page 4, paragraph 55) does not mean the tasks priorities are fix, thus capable of changing.

Moreover, even assuming arguendo that applicant’s position is correct, applicant's arguments against the references individually cannot show nonobviousness by attacking

references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

18. On page 7, 3<sup>rd</sup> paragraph, applicant alleges that the examiner's statement in which task priorities are NOT fixed is simply contradictory to the teaching of Saleh. Examiner concluded with such statement based on Saleh's disclosure on page 4, paragraph 55. If applicant believes such statement is a contradictory to Saleh's teaching and that Saleh teaches of tasks with fixed priority or that tasks priority cannot be changed, then applicant needs to provide citation in reference that show such support.

19. With respect to applicant's remark that "it would appear that the only teaching provided of such a step is the applicant's application" (page 7, 3<sup>rd</sup> paragraph), the examiner disagrees. Saleh discloses that some tasks are being processed at a lower priority level than the other (paragraph 55). Saleh also discloses that when a node receives LSAs message, it is first analyzed to determine the appropriate actions to be formed (paragraphs 99 – 100, and fig. 6). The LSA is then acknowledged by sending back an appropriate response to the node having transmitted the message. In other words, when performing the appropriate actions such as sending back an appropriate response to the node having transmitted the message, the actions and/or the task that perform such actions is considering having a higher precedence than any others tasks, thus implies its priority changes.

Furthermore, in response to applicant's arguments (page 7, 3<sup>rd</sup> paragraph) against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In addition, Welland discloses that when an event is reported for a task, it would raise the current priority of the task to a higher priority level (col. 4, line 63 – col. 4, line 4). It would also be obvious for one of ordinary skill in the art, at the time the invention was made, to combine Welland's teaching with Saleh to boost a current priority of a task to a higher priority level so that necessary operation can be formed in a timely manner to enhance system performance.

20. With respect to applicant's remark (page 9, 5<sup>th</sup> paragraph) regarding Welland's teaching in column 5, this citation was never used in the rejection.

Furthermore, with respect to applicant's assumption that Welland's teaching with tasks has fixed priorities (page 9, last paragraph), the examiner disagrees. The examiner refers applicant to col. 4, line 63 – col. 5, line 4, which clearly discloses that when an event is reported for a task, it would raise the current priority of the task to a higher priority level.

In response to applicant's argument that "...the entire reference of Welland should be considered" when determining the motivation (page 9, last paragraph), the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references

would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

In response to applicant's argument (page 9, last paragraph) that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation for the rejection is found in the knowledge generally available to one of ordinary skill in the art.

21. With respect to applicant's remark on page 10, last paragraph regarding claims 6 and 11, because the arguments are similar to those in claim 1, applicant is directed to the response as set forth above.

### ***Conclusion***

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lilian Vo whose telephone number is 571-272-3774. The examiner can normally be reached on Monday - Thursday, 7:30am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on 571-272-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2195

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist at 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lilian Vo  
Examiner  
Art Unit 2127

lv  
May 12, 2005

  
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